



State of California - Health and Human Services Agency  
California Department of Public Health



Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804  
Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 12-0569**

Collector: RHM	RHB	Requestor: Roger Lupo	RHB
		CDPH - RHB, 1500 Capitol Av., MS 7610	
SAN ONOFRE	CA	Sacramento	CA 95814-5006
Phone Number:		Phone Number:	916-440-7955
Site/Project Name: San Onofre NPP / Biota / 4th Qtr 2012			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/24/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0569-01	Sample ID: R 92336	Time Collected: 10/22/2012 11:55	Sampling Point: Calif Sheephead	
	Sample Type: Fish/Shellfish			
K-40	EPA 901.1	16.4 +/- 0.379	0.486	pCi/L

Dry wt / wet wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <b>10-24-12</b>	Lab No. (Leave Blank) <b>12-0569</b>
	Date & Time Sampled <b>10-22-12 11:55</b>	Serial Number <b>R 92336</b>
<b>Collector Information</b> Name: Dept./Branch: Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- ☐ Air Filters    Date/Time \_\_\_\_\_    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_    ☐ Milk    ☐ Soil/Sediment  
 Starting: \_\_\_\_\_    ☐ Wipes    ☐ Biota (Type): **Calf Sheeplung**  
 Net (M<sup>3</sup>) \_\_\_\_\_    ☐ Radon Canister    ☐ Other: \_\_\_\_\_  
☐ Air Charcoal Cartridge

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☐ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☐ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

1.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____		Time Custody Released _____
2.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____		Time Custody Released _____
3.	Date <b>10-24-12</b>	Name (Print) <b>UA</b>	Signature <b>Dwight M. Ali</b>	Date _____
	Time Custody Received <b>10:00</b>	Organization <b>DWRIB</b>		Time Custody Released _____

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:**  
☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample
- B. Preservatives/Carriers:**  
☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable



State of California - Health and Human Services Agency  
California Department of Public Health



Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804  
Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 12-0519**

Collector: RHM	RHB	Requestor: Roger Lupo	RHB
SAN ONOFRE	CA	CDPH - RHB, 1500 Capitol Av., MS 7610	
Phone Number:		Sacramento	CA 95814-5006
		Phone Number:	916-440-7955
Site/Project Name: San Onofre NPP / Biota / 4th Qtr 2012			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/12/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0519-01	Sample ID: R 92321	Time Collected: 10/9/2012 11:20	Sampling Point: Sheaphead	
	Sample Type: Fish/Shellfish			
Dry Wt/Wet Wt		0.2433		
K-40	HASL Ga-01-R	14.2 +/- 0.359	0.599	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <u>10-12-12</u>	Lab No. (Leave Blank) <u>12-0519</u>
	Date & Time Sampled <u>10-9-12 11:20</u>	Serial Number <u>R 92321</u>
<b>Collector Information</b> Name: Dept./Branch: Address: <u>RHM</u> Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): <u>San Onofre,</u> <u>Sonop e</u> System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)
- ☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- ☐ Air Filters    Date/Time    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
Finishing: \_\_\_\_\_  
Starting: \_\_\_\_\_  
Net (M<sup>3</sup>) \_\_\_\_\_  
☐ Air Charcoal Cartridge    ☐ Milk    ☐ Soil/Sediment  
☐ Wipes    ☐ Biota (Type): \_\_\_\_\_  
☐ Radon Canister    ☐ Other: Shrimphead

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Gross Alpha            | <input type="checkbox"/> Gross Beta                | <input type="checkbox"/> Gamma Scan                  |
| <input type="checkbox"/> Total Uranium          | <input type="checkbox"/> Total Beta (LSC)          | <input type="checkbox"/> NORM (Gamma)                |
| <input type="checkbox"/> Total Radium           | <input type="checkbox"/> Tritium ( <sup>3</sup> H) | <input type="checkbox"/> Isotopic Americium / Curium |
| <input type="checkbox"/> Radium-226             | <input type="checkbox"/> Carbon-14                 | <input type="checkbox"/> Isotopic Plutonium          |
| <input type="checkbox"/> Radium-228             | <input type="checkbox"/> Iodine-131                | <input type="checkbox"/> Isotopic Thorium            |
| <input type="checkbox"/> Radon-222              | <input type="checkbox"/> Strontium-89, 90          | <input type="checkbox"/> Isotopic Uranium            |
| <input type="checkbox"/> Other (Specify): _____ | <input type="checkbox"/> Nickel-63                 | <input type="checkbox"/> Iron-55                     |

## CHAIN OF CUSTODY

- |    |                                      |                            |                              |                             |
|----|--------------------------------------|----------------------------|------------------------------|-----------------------------|
| 1. | Date _____                           | Name (Print) _____         | _____                        | Date _____                  |
|    | Time Custody Received _____          | Organization _____         | Signature _____              | Time Custody Released _____ |
| 2. | Date _____                           | Name (Print) _____         | _____                        | Date _____                  |
|    | Time Custody Received _____          | Organization _____         | Signature _____              | Time Custody Released _____ |
| 3. | Date <u>10-12-12</u>                 | Name (Print) <u>VA</u>     | _____                        | Date _____                  |
|    | Time Custody Received <u>1:30 pm</u> | Organization <u>DWR/LB</u> | Signature <u>[Signature]</u> | Time Custody Released _____ |

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:
- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> Acceptable            | <input type="checkbox"/> Broken Container  | <input type="checkbox"/> Leaked in Transit   | <input type="checkbox"/> Improper Container |
| <input type="checkbox"/> Holding Time Exceeded | <input type="checkbox"/> Sample Not Cooled | <input type="checkbox"/> Insufficient Sample |   |
- B. Preservatives/Carriers:
- |   |  |                                    |   |
|---|--|------------------------------------|---|
| <input type="checkbox"/> Added While Sampling | <input type="checkbox"/> Added in Laboratory | <input type="checkbox"/> Not Added | <input type="checkbox"/> Not Applicable |
|---|--|------------------------------------|---|



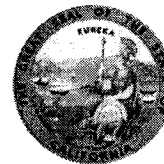
State of California - Health and Human Services Agency

California Department of Public Health

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940



FINAL Analysis Results Report for Task ID. 12-0520

Collector: RHM	RHB	Requestor: Roger Lupo	RHB
SAN ONOFRE CA		CDPH - RHB, 1500 Capitol Av., MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / Biota / 4th Qtr 2012			
System No:		Billing Agency: RHB	Samples Received by Lab: 10/12/2012

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0520-01	Sample ID: R 92322	Time Collected: 10/9/2012 11:15	Sampling Point: Black Perch	
	Sample Type: Fish/Shellfish			
Dry Wt/Wet Wt		0.2613		
K-40	HASL Ga-01-R	13.2 +/- 0.364	0.792	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 10-12-12	Lab No. (Leave Blank) 12-0520
	Date & Time Sampled 10-9-12 11:15	Serial Number R 92322
<b>Collector Information</b> Name: Dept./Branch: Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☒ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- ☐ Air Filters    Date/Time    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
Finishing: \_\_\_\_\_  
Starting: \_\_\_\_\_  
Net (M<sup>3</sup>) \_\_\_\_\_  
☐ Air Charcoal Cartridge    ☐ Milk    ☐ Soil/Sediment  
☐ Radon Canister    ☒ Biota (Type): Black Perch  
☐ Other: \_\_\_\_\_

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval) RHM

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☐ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☒ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

1. Date \_\_\_\_\_ Name (Print) \_\_\_\_\_ Date \_\_\_\_\_  
Time Custody Received \_\_\_\_\_ Organization \_\_\_\_\_ Signature \_\_\_\_\_ Time Custody Released \_\_\_\_\_
2. Date \_\_\_\_\_ Name (Print) \_\_\_\_\_ Date \_\_\_\_\_  
Time Custody Received \_\_\_\_\_ Organization \_\_\_\_\_ Signature \_\_\_\_\_ Time Custody Released \_\_\_\_\_
3. Date 10-12-12 Name (Print) VA Date \_\_\_\_\_  
Time Custody Received 10-1-30 Organization DWRLB Signature [Signature] Time Custody Released \_\_\_\_\_

## LABORATORY REMARKS (Leave Blank)

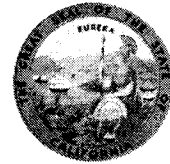
- A. Condition at Time of Receipt:  
☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample
- B. Preservatives/Carriers:  
☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable



State of California - Health and Human Services Agency  
California Department of Public Health

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804  
Phone: (510) 620-2911 Fax: (510) 620-2940



**FINAL Analysis Results Report for Task ID. 12-0521**

Collector: RHM	RHB	Requestor: Roger Lupo	RHB
SAN ONOFRE CA		CDPH - RHB, 1500 Capitol Av., MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / Biota / 4th Qtr 2012			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/12/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0521-01	Sample ID: R 92323	Time Collected: 10/9/2012 10:55	Sampling Point: California Mussel	
	Sample Type: Fish/Shellfish			
Dry Wt/Wet Wt		0.1657		
K-40	HASL Ga-01-R	12.7 +/- 0.327	0.510	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <u>10-12-12</u>	Lab No. (Leave Blank) <u>12-0521</u>
	Date & Time Sampled <u>10-9-12 10:55</u>	Serial Number <u>R 92323</u>
<b>Collector Information</b> Name: Dept./Branch: Address: <u>RHM</u> Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): <u>San Diego</u> System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- |   |  |  |  |
|---|--|--|--|
| <input type="checkbox"/> Drinking Water   | <input type="checkbox"/> Groundwater                 | <input type="checkbox"/> Surface Water       | <input type="checkbox"/> Wastewater                                    |
| <input type="checkbox"/> Raw  | <input type="checkbox"/> Water Treatment Plant (WTP) | <input type="checkbox"/> Distribution System | <input type="checkbox"/> Point of Use (POU)                            |
| <input type="checkbox"/> Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted |  |  |  |
| <input type="checkbox"/> Air Filters  | Date/Time  | <input type="checkbox"/> Seawater            | <input type="checkbox"/> Sludge (Semi-solid Samples)                   |
| Finishing: _____  | _____  | <input type="checkbox"/> Milk                | <input type="checkbox"/> Soil/Sediment                                 |
| Starting: _____   | _____  | <input type="checkbox"/> Wipes               | <input checked="" type="checkbox"/> Biota (Type): <u>Pacif. Mussel</u> |
| Net (M <sup>3</sup> ) _____   | _____  | <input type="checkbox"/> Radon Canister      | <input type="checkbox"/> Other: _____                                  |
| <input type="checkbox"/> Air Charcoal Cartridge   |  |  |  |

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_
- ☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_
- ☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Gross Alpha            | <input type="checkbox"/> Gross Beta                | <input type="checkbox"/> Gamma Scan                  |
| <input type="checkbox"/> Total Uranium          | <input type="checkbox"/> Total Beta (LSC)          | <input type="checkbox"/> NORM (Gamma)                |
| <input type="checkbox"/> Total Radium           | <input type="checkbox"/> Tritium ( <sup>3</sup> H) | <input type="checkbox"/> Isotopic Americium / Curium |
| <input type="checkbox"/> Radium-226             | <input type="checkbox"/> Carbon-14                 | <input type="checkbox"/> Isotopic Plutonium          |
| <input type="checkbox"/> Radium-228             | <input type="checkbox"/> Iodine-131                | <input type="checkbox"/> Isotopic Thorium            |
| <input type="checkbox"/> Radon-222              | <input type="checkbox"/> Strontium-89, 90          | <input type="checkbox"/> Isotopic Uranium            |
| <input type="checkbox"/> Other (Specify): _____ | <input type="checkbox"/> Nickel-63                 | <input type="checkbox"/> Iron-55                     |

## CHAIN OF CUSTODY

- |    |                                    |                            |                                 |                             |
|----|------------------------------------|----------------------------|---------------------------------|-----------------------------|
| 1. | Date _____                         | Name (Print) _____         | _____                           | Date _____                  |
|    | Time Custody Received _____        | Organization _____         | Signature _____                 | Time Custody Released _____ |
| 2. | Date _____                         | Name (Print) _____         | _____                           | Date _____                  |
|    | Time Custody Received _____        | Organization _____         | Signature _____                 | Time Custody Released _____ |
| 3. | Date <u>10-12-12</u>               | Name (Print) <u>VA</u>     | _____                           | Date _____                  |
|    | Time Custody Received <u>13:30</u> | Organization <u>DWR LB</u> | Signature <u>Victoria M. Ch</u> | Time Custody Released _____ |

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:
- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> Acceptable            | <input type="checkbox"/> Broken Container  | <input type="checkbox"/> Leaked in Transit   | <input type="checkbox"/> Improper Container |
| <input type="checkbox"/> Holding Time Exceeded | <input type="checkbox"/> Sample Not Cooled | <input type="checkbox"/> Insufficient Sample |   |
- B. Preservatives/Carriers:
- |   |  |                                    |   |
|---|--|------------------------------------|---|
| <input type="checkbox"/> Added While Sampling | <input type="checkbox"/> Added in Laboratory | <input type="checkbox"/> Not Added | <input type="checkbox"/> Not Applicable |
|---|--|------------------------------------|---|





State of California - Health and Human Services Agency  
California Department of Public Health

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804  
Phone: (510) 620-2911 Fax: (510) 620-2940



**FINAL Analysis Results Report for Task ID. 12-0522**

Collector: RHM	RHB	Requestor: Roger Lupo	RHB
SAN ONOFRE CA		CDPH - RHB, 1500 Capitol Av., MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / Biota / 4th Qtr 2012			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/12/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0522-01	Sample ID: R 92324	Time Collected: 10/9/2012 11:25	Sampling Point: Spiny Lobster	
	Sample Type: Fish/Shellfish			
Dry Wt/Wet Wt		0.2666		
K-40	HASL Ga-01-R	14.7 +/- 0.353	0.459	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 10-12-12	Lab No. (Leave Blank) 12-0522
	Date & Time Sampled 10-9-12 11:25	Serial Number R 92324
<b>Collector Information</b> Name: Dept./Branch: RHM Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: San Onofre Sampling Point (s): System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- |   |  |  |   |
|---|--|--|---|
| <input type="checkbox"/> Drinking Water   | <input type="checkbox"/> Groundwater                 | <input type="checkbox"/> Surface Water       | <input type="checkbox"/> Wastewater                             |
| <input type="checkbox"/> Raw  | <input type="checkbox"/> Water Treatment Plant (WTP) | <input type="checkbox"/> Distribution System | <input type="checkbox"/> Point of Use (POU)                     |
| <input type="checkbox"/> Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted |  |  |   |
| <input type="checkbox"/> Air Filters  | Date/Time  | <input type="checkbox"/> Seawater            | <input type="checkbox"/> Sludge (Semi-solid Samples)            |
| Finishing: _____  | _____  | <input type="checkbox"/> Milk                | <input type="checkbox"/> Soil/Sediment                          |
| Starting: _____   | _____  | <input type="checkbox"/> Wipes               | <input checked="" type="checkbox"/> Biota (Type): Spiny Lobster |
| Net (M <sup>3</sup> ) _____   | _____  | <input type="checkbox"/> Radon Canister      | <input type="checkbox"/> Other: _____                           |
| <input type="checkbox"/> Air Charcoal Cartridge   |  |  |   |

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_
- ☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_
- ☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Gross Alpha            | <input type="checkbox"/> Gross Beta                | <input type="checkbox"/> Gamma Scan                  |
| <input type="checkbox"/> Total Uranium          | <input type="checkbox"/> Total Beta (LSC)          | <input type="checkbox"/> NORM (Gamma)                |
| <input type="checkbox"/> Total Radium           | <input type="checkbox"/> Tritium ( <sup>3</sup> H) | <input type="checkbox"/> Isotopic Americium / Curium |
| <input type="checkbox"/> Radium-226             | <input type="checkbox"/> Carbon-14                 | <input type="checkbox"/> Isotopic Plutonium          |
| <input type="checkbox"/> Radium-228             | <input type="checkbox"/> Iodine-131                | <input type="checkbox"/> Isotopic Thorium            |
| <input type="checkbox"/> Radon-222              | <input type="checkbox"/> Strontium-89, 90          | <input type="checkbox"/> Isotopic Uranium            |
| <input type="checkbox"/> Other (Specify): _____ | <input type="checkbox"/> Nickel-63                 | <input type="checkbox"/> Iron-55                     |

## CHAIN OF CUSTODY

1.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____		Time Custody Released _____
2.	Date _____	Name (Print) _____	Signature _____	Date _____
	Time Custody Received _____	Organization _____		Time Custody Released _____
3.	Date 10-12-12	Name (Print) UA	Signature [Signature]	Date _____
	Time Custody Received 13:30	Organization DWRIB		Time Custody Released _____

## LABORATORY REMARKS (Leave Blank)

## A. Condition at Time of Receipt:

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> Acceptable            | <input type="checkbox"/> Broken Container  | <input type="checkbox"/> Leaked in Transit   | <input type="checkbox"/> Improper Container |
| <input type="checkbox"/> Holding Time Exceeded | <input type="checkbox"/> Sample Not Cooled | <input type="checkbox"/> Insufficient Sample |   |

## B. Preservatives/Carriers:

- |   |  |                                    |   |
|---|--|------------------------------------|---|
| <input type="checkbox"/> Added While Sampling | <input type="checkbox"/> Added in Laboratory | <input type="checkbox"/> Not Added | <input type="checkbox"/> Not Applicable |
|---|--|------------------------------------|---|



State of California - Health and Human Services Agency  
California Department of Public Health



Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804  
Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 12-0502**

Collector: RHM	RHB	Requestor: Roger Lupo	RHB
SAN ONOFRE CA		CDPH - RHB, 1500 Capitol Av., MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / Biota / 4th Qtr 2012			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/5/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0502-01	Sample ID: R 92315	Time Collected: 10/3/2012 14:08	Sampling Point: Lobster, SONGS A	
	Sample Type: Fish/Shellfish			
Dry Wt/Wet Wt		0.258		
K-40	HASL Ga-01-R	16.2 +/- 0.390	0.492	pCi/g dry wt

RECEIVED  
2012 OCT 10 PM 1:40  
RADIOLOGIC HEALTH SRV  
RICHMOND

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <u>10-5-12</u>	Lab No. (Leave Blank) <u>12-0502</u>
	Date & Time Sampled <u>10-3-12 14:08</u>	Serial Number <u>R 92315</u>
<b>Collector Information</b> Name: <u>RHM</u> Dept./Branch: <u>Souap A</u> Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): <u>Souap A</u> System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxizone / Fluoridated / Coagulated / pH Adjusted
- ☐ Air Filters    Date/Time \_\_\_\_\_    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_    ☐ Milk    ☐ Soil/Sediment  
 Starting: \_\_\_\_\_    ☐ Wipes    ☒ Biota (Type): Lobster  
 Net (M<sup>3</sup>) \_\_\_\_\_    ☐ Radon Canister    ☐ Other: \_\_\_\_\_  
☐ Air Charcoal Cartridge

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☐ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☐ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

1. \_\_\_\_\_
- |                       |              |           |                       |
|-----------------------|--------------|-----------|-----------------------|
| Date                  | Name (Print) |           | Date                  |
| Time Custody Received | Organization | Signature | Time Custody Released |
2. \_\_\_\_\_
- |                       |              |           |                       |
|-----------------------|--------------|-----------|-----------------------|
| Date                  | Name (Print) |           | Date                  |
| Time Custody Received | Organization | Signature | Time Custody Released |
3. \_\_\_\_\_
- |                                    |                           |                                |                       |
|------------------------------------|---------------------------|--------------------------------|-----------------------|
| Date <u>10-5-12</u>                | Name (Print) <u>UA</u>    |                                | Date                  |
| Time Custody Received <u>11:15</u> | Organization <u>DWRLB</u> | Signature <u>Antonio M. de</u> | Time Custody Released |

## LABORATORY REMARKS (Leave Blank)

## A. Condition at Time of Receipt:

- ☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample

## B. Preservatives/Carriers:

- ☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable



State of California - Health and Human Services Agency  
California Department of Public Health



Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 12-0503**

Collector: RHM	RHB	Requestor: Roger Lupo	RHB
SAN ONOFRE CA		CDPH - RHB, 1500 Capitol Av., MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / Biota / 4th Qtr 2012			
System No:		Billing Agency: RHB	Samples Received by Lab: 10/5/2012

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0503-01	Sample ID: R 92316 Sample Type: Fish/Shellfish	Time Collected: 10/3/2012 14:00	Sampling Point: California Mussels, SONGS A	
Dry Wt/Wet Wt		0.177		
K-40	HASL Ga-01-R	11.4 +/- 0.303	0.537	pCi/g dry wt

RECEIVED  
2012 OCT 10 PM 1:41  
RADIOLOGICAL HEALTH BRANCH  
RICHMOND

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 10-5-12	Lab No. (Leave Blank) 12-0503
	Date & Time Sampled 10-3-12 14:00	Serial Number R 92316
<b>Collector Information</b> Name: Dept./Branch: RHM Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): Sonap A System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- ☐ Air Filters    Date/Time    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_    ☐ Milk    ☐ Soil/Sediment  
 Starting: \_\_\_\_\_    ☐ Wipes    ☒ Biota (Type): \_\_\_\_\_  
 Net (M<sup>3</sup>) \_\_\_\_\_    ☐ Radon Canister    ☒ Other: Calif mussel
- ☐ Air Charcoal Cartridge

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☒ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☐ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☐ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

1. \_\_\_\_\_
- |                       |              |           |                       |
|-----------------------|--------------|-----------|-----------------------|
| Date                  | Name (Print) | _____     | Date                  |
| Time Custody Received | Organization | Signature | Time Custody Released |
2. \_\_\_\_\_
- |                       |              |           |                       |
|-----------------------|--------------|-----------|-----------------------|
| Date                  | Name (Print) | _____     | Date                  |
| Time Custody Received | Organization | Signature | Time Custody Released |
3. \_\_\_\_\_
- |                             |                    |                          |                       |
|-----------------------------|--------------------|--------------------------|-----------------------|
| Date 10-5-12                | Name (Print) VA    | _____                    | Date                  |
| Time Custody Received 11:15 | Organization DWRLB | Signature Victoria M. Al | Time Custody Released |

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:
- ☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample
- B. Preservatives/Carriers:
- ☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable



State of California - Health and Human Services Agency  
California Department of Public Health



Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804  
Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 12-0504**

Collector: RHM	RHB	Requestor: Roger Lupo	RHB
SAN ONOFRE	CA	CDPH - RHB, 1500 Capitol Av., MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7955	
Site/Project Name: San Onofre NPP / Biota / 4th Qtr 2012			
System No:	Billing Agency: RHB	Samples Received by Lab: 10/5/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0504-01	Sample ID: R 92317	Time Collected: 10/3/2012 09:30	Sampling Point: Black Perch,	
	Sample Type: Fish/Shellfish		SONGS B	
Dry Wt/Wet Wt		0.259		
K-40	HASL Ga-01-R	15.1 +/- 0.376	0.561	pCi/g dry wt

RECEIVED  
2012 OCT 18 PM 1:41  
RADIOLOGICAL HEALTH DIVISION

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 10-5-12	Lab No. (Leave Blank) 12-0504
	Date & Time Sampled 10-3-12 9:30	Serial Number R 92317
<b>Collector Information</b> Name: Dept./Branch: RHM Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sonoma B Sampling Point (s): System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted

- ☐ Air Filters    Date/Time    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_    ☐ Milk    ☐ Soil/Sediment  
 Starting: \_\_\_\_\_    ☐ Wipes    ☒ Biota (Type): Black Perch  
 Net (M<sup>3</sup>) \_\_\_\_\_    ☐ Radon Canister    ☐ Other: \_\_\_\_\_  
☐ Air Charcoal Cartridge

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☒ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☐ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☐ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

- |    |                             |                    |                       |                             |
|----|-----------------------------|--------------------|-----------------------|-----------------------------|
| 1. | Date _____                  | Name (Print) _____ | Signature _____       | Date _____                  |
|    | Time Custody Received _____ | Organization _____ | Signature _____       | Time Custody Released _____ |
| 2. | Date _____                  | Name (Print) _____ | Signature _____       | Date _____                  |
|    | Time Custody Received _____ | Organization _____ | Signature _____       | Time Custody Released _____ |
| 3. | Date 10-5-12                | Name (Print) UA    | Signature [Signature] | Date _____                  |
|    | Time Custody Received 11:15 | Organization DWRLB | Signature [Signature] | Time Custody Released _____ |

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:**  
☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample
- B. Preservatives/Carriers:**  
☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable





State of California - Health and Human Services Agency  
California Department of Public Health



Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804  
Phone: (510) 620-2911 Fax: (510) 620-2940

**FINAL Analysis Results Report for Task ID. 12-0087**

Collector: RHM	RHB	Requestor: Steve Hsu	RHB
SAN ONOFRE	CA	1500 Capitol Avenue, MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7940	
Site/Project Name: San Onofre NPP / Biota / 2nd Qtr 2012			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/26/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0087-01	Sample ID: R 91978	Time Collected: 4/24/2012 12:15	Sampling Point: California Spiny Lobster	
	Sample Type: Fish/Shellfish			
Dry Wt/Wet Wt		0.2610		
K-40	HASL Ga-01-R	14.7 +/- 0.345	0.468	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <u>4-26-12</u>	Lab No. (Leave Blank) <u>17-0047</u>
	Date & Time Sampled <u>4-24-12 12:15</u>	Serial Number <u>R 91978</u>
<b>Collector Information</b> Name: Dept./Branch: Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- ☐ Air Filters    Date/Time    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_  
 Starting: \_\_\_\_\_  
 Net (M<sup>3</sup>) \_\_\_\_\_  
☐ Air Charcoal Cartridge
- ☐ Milk    ☐ Soil/Sediment  
☐ Wipes    ☐ Biota (Type): Ca spiny  
☐ Radon Canister    ☐ Other: lobster

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☒ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☐ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

- |    |                             |                             |                             |
|----|-----------------------------|-----------------------------|-----------------------------|
| 1. | Date _____                  | Name (Print) _____          | Date _____                  |
|    | Time Custody Received _____ | Organization _____          | Signature _____             |
| 2. | Date _____                  | Name (Print) _____          | Time Custody Released _____ |
|    | Time Custody Received _____ | Organization _____          | Date _____                  |
| 3. | Date <u>4-26-12</u>         | Name (Print) <u>UN</u>      | Time Custody Released _____ |
|    | Date <u>10:00</u>           | Organization <u>DWR LCB</u> | Date _____                  |
|    | Time Custody Received _____ | Signature _____             | Time Custody Released _____ |

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:**  
☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample
- B. Preservatives/Carriers:**  
☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable



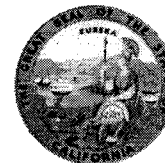
State of California - Health and Human Services Agency

California Department of Public Health

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940



FINAL Analysis Results Report for Task ID. 12-0084

Collector: RHM	RHB	Requestor: Steve Hsu	RHB
SAN ONOFRE CA		1500 Capitol Avenue, MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7940	
Site/Project Name: San Onofre NPP / Biota / 2nd Qtr 2012			
System No:		Billing Agency: RHB	Samples Received by Lab: 4/26/2012

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0084-01	Sample ID: R 91975 Sample Type: Fish/Shellfish	Time Collected: 4/24/2012 11:05	Sampling Point: California Sheephead	
Dry Wt/Wet Wt		0.2267		
K-40	HASL Ga-01-R	18.6 +/- 0.428	0.451	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 4-26-12	Lab No. (Leave Blank) 12-0044
	Date & Time Sampled 4-24-12 11:05	Serial Number R 91975
<b>Collector Information</b> Name: RYM Dept./Branch: Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: San Onofre Sampling Point (s): Units 2/3 Outfall System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted

- ☐ Air Filters    Date/Time    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
☒ Finishing: \_\_\_\_\_    ☐ Milk    ☐ Soil/Sediment  
☐ Starting: \_\_\_\_\_    ☐ Wipes    ☒ Biota (Type): Ad. Sheephead  
☐ Net (M<sup>3</sup>) \_\_\_\_\_    ☐ Radon Canister    ☐ Other: \_\_\_\_\_  
☐ Air Charcoal Cartridge

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☐ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☐ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

1.	Date	Name (Print)		Date
	Time Custody Received	Organization	Signature	Time Custody Released
2.	Date	Name (Print)		Date
	Time Custody Received	Organization	Signature	Time Custody Released
3.	Date	Name (Print)		Date
	Time Custody Received	Organization	Signature	Time Custody Released

1. Date: 4-26-12, Name: [Signature], Organization: [Signature]  
 2. Date: 4-26-12, Name: [Signature], Organization: [Signature]  
 3. Date: 4-26-12, Name: [Signature], Organization: [Signature]

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:**  
☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample
- B. Preservatives/Carriers:**  
☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable



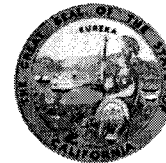
State of California - Health and Human Services Agency

California Department of Public Health

## Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940



### FINAL Analysis Results Report for Task ID. 12-0086

Collector: RHM	RHB	Requestor: Steve Hsu	RHB
SAN ONOFRE	CA	1500 Capitol Avenue, MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7940	
Site/Project Name: San Onofre NPP / Biota / 2nd Qtr 2012			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/26/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0086-01	Sample ID: R 91977	Time Collected: 4/24/2012 09:15	Sampling Point: California Mussel	
	Sample Type: Fish/Shellfish			
Dry Wt/Wet Wt		0.1986		
K-40	HASL Ga-01-R	13.7 +/- 0.387	0.870	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <b>4-26-12</b>	Lab No. (Leave Blank) <b>12-0086</b>
	Date & Time Sampled <b>4-24-12 9:15</b>	Serial Number <b>R 91977</b>
<b>Collector Information</b> Name: Dept./Branch: <b>RHM</b> Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: <b>San Onofre</b> Sampling Point (s): <b>units 213 Outfall</b> System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- ☒ Air Filters    Date/Time \_\_\_\_\_    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_    ☐ Milk    ☒ Soil/Sediment **California**  
 Starting: \_\_\_\_\_    ☐ Wipes    ☒ Biota (Type) **muscle**  
 Net (M<sup>3</sup>) \_\_\_\_\_    ☐ Radon Canister    ☐ Other: **muscle**  
☐ Air Charcoal Cartridge

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☐ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☐ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

1. Date \_\_\_\_\_ Name (Print) \_\_\_\_\_ Date \_\_\_\_\_  
 Time Custody Received \_\_\_\_\_ Organization \_\_\_\_\_ Signature \_\_\_\_\_ Time Custody Released \_\_\_\_\_
2. Date \_\_\_\_\_ Name (Print) \_\_\_\_\_ Date \_\_\_\_\_  
 Time Custody Received \_\_\_\_\_ Organization \_\_\_\_\_ Signature \_\_\_\_\_ Time Custody Released \_\_\_\_\_
3. Date **4-26-12** Name (Print) **VA** Date \_\_\_\_\_  
**10:00** Name (Print) **DWRIB** Signature **Victoria M. Allen** Time Custody Released \_\_\_\_\_  
 Time Custody Received \_\_\_\_\_ Organization \_\_\_\_\_ Signature \_\_\_\_\_ Time Custody Released \_\_\_\_\_

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:
- ☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample
- B. Preservatives/Carriers:
- ☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable



State of California - Health and Human Services Agency

California Department of Public Health

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940



**FINAL Analysis Results Report for Task ID. 12-0085**

Collector:	RHM	RHB	Requestor:	Steve Hsu	RHB
	SAN ONOFRE	CA		1500 Capitol Avenue, MS 7610	
	Phone Number:			Sacramento	CA 95814-5006
				Phone Number:	916-440-7940
Site/Project Name: San Onofre NPP / Biota / 2nd Qtr 2012					
System No:		Billing Agency: RHB		Samples Received by Lab: 4/26/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0085-01	Sample ID: R 91976	Time Collected: 4/24/2012 09:10	Sampling Point: Sea Bass	
	Sample Type: Fish/Shellfish			
Dry Wt/Wet Wt		0.2303		
K-40	HASL Ga-01-R	17.4 +/- 0.396	0.407	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 4-26-12	Lab No. (Leave Blank) 12-0085
	Date & Time Sampled 4-24-12 9:10	Serial Number R 91976
<b>Collector Information</b> Name: Dept./Branch: RHM Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: San Onofre Sampling Point (s): units 2/3 outfall System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- ☐ Air Filters    Date/Time    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_    ☐ Milk    ☐ Soil/Sediment  
 Starting: \_\_\_\_\_    ☐ Wipes    ☒ Biota (Type): Barred  
 Net (M<sup>3</sup>) \_\_\_\_\_    ☐ Radon Canister    ☐ Other: sand Bass
- ☐ Air Charcoal Cartridge

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☐ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☒ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

- |    |                             |                     |                             |
|----|-----------------------------|---------------------|-----------------------------|
| 1. | Date _____                  | Name (Print) _____  | Date _____                  |
|    | Time Custody Received _____ | Organization _____  | Signature _____             |
| 2. | Date _____                  | Name (Print) _____  | Date _____                  |
|    | Time Custody Received _____ | Organization _____  | Signature _____             |
| 3. | Date 4-26-12                | Name (Print) UA     | Date _____                  |
|    | Time Custody Received 10:00 | Organization DEWRLB | Signature [Signature]       |
|    |                             |                     | Time Custody Released _____ |

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:**  
☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample
- B. Preservatives/Carriers:**  
☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable





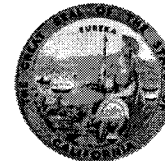
State of California - Health and Human Services Agency

California Department of Public Health

## Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940



### FINAL Analysis Results Report for Task ID. 12-0045

Collector: RHM	RHB	Requestor: Steve Hsu	RHB
		1500 Capitol Avenue, MS 7610	
SAN ONOFRE	CA	Sacramento	CA 95814-5006
Phone Number:		Phone Number: 916-440-7940	
Site/Project Name: San Onofre NPP / Biota / 2nd Qtr 2012			
System No:	Billing Agency: RHB	Samples Received by Lab: 4/12/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0045-01	Sample ID: R 92672 Sample Type: Biota	Time Collected: 4/10/2012 13:00	Sampling Point: Black Perch	
Dry Wt/Wet Wt		0.2315		
K-40	HASL Ga-01-R	15.5 +/- 0.389	0.575	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 4-12-12	Lab No. (Leave Blank) 12-0045
	Date & Time Sampled 4-10-12 13:00	Serial Number R 92672
<b>Collector Information</b> Name: Dept./Branch: RHM Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): Songs c System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water ☐ Groundwater ☐ Surface Water ☐ Wastewater  
☐ Raw ☐ Water Treatment Plant (WTP) ☐ Distribution System ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted

- ☐ Air Filters ☐ Seawater ☐ Sludge (Semi-solid Samples)  
Finishing: \_\_\_\_\_ ☐ Milk ☐ Soil/Sediment  
Starting: \_\_\_\_\_ ☐ Wipes ☐ Biota (Type): Black perch  
Net (M<sup>3</sup>) \_\_\_\_\_ ☐ Radon Canister ☐ Other: \_\_\_\_\_  
☐ Air Charcoal Cartridge

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha ☐ Gross Beta ☐ Gamma Scan  
☐ Total Uranium ☐ Total Beta (LSC) ☐ NORM (Gamma)  
☐ Total Radium ☐ Tritium (<sup>3</sup>H) ☐ Isotopic Americium / Curium  
☐ Radium-226 ☐ Carbon-14 ☐ Isotopic Plutonium  
☐ Radium-228 ☐ Iodine-131 ☐ Isotopic Thorium  
☐ Radon-222 ☐ Strontium-89, 90 ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_ ☐ Nickel-63 ☐ Iron-55

## CHAIN OF CUSTODY

1.	Date	Name (Print)	Date
	Time Custody Received	Organization	Time Custody Released
2.	Date	Name (Print)	Date
	Time Custody Received	Organization	Time Custody Released
3.	Date 4-12-12	Name (Print) UA	Date
	Time Custody Received 11:00	Organization DWRLB	Time Custody Released

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:  
☐ Acceptable ☐ Broken Container ☐ Leaked in Transit ☐ Improper Container  
☐ Holding Time Exceeded ☐ Sample Not Cooled ☐ Insufficient Sample
- B. Preservatives/Carriers:  
☐ Added While Sampling ☐ Added in Laboratory ☐ Not Added ☐ Not Applicable



State of California - Health and Human Services Agency

California Department of Public Health

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940



**FINAL Analysis Results Report for Task ID. 12-0044**

Collector: RHM	RHB	Requestor: Steve Hsu	RHB
SAN ONOFRE CA		1500 Capitol Avenue, MS 7610	
Phone Number:		Sacramento CA 95814-5006	
		Phone Number: 916-440-7940	
Site/Project Name: San Onofre NPP / Biota / 2nd Qtr 2012			
System No:		Billing Agency: RHB	Samples Received by Lab: 4/12/2012

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0044-01	Sample ID: R 92671	Time Collected: 4/10/2012 12:00	Sampling Point: Sheephead	
	Sample Type: Biota			
Dry Wt/Wet Wt		0.2225		
K-40	HASL Ga-01-R	19.1 +/- 0.437	0.454	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <div>4-12-12</div>		Lab No. (Leave Blank) <div>12-0044</div>	
<b>Collector Information</b> Name: Dept./Branch: Address:  Telephone No.:	Date & Time Sampled <div>4-10-12 12:00</div>		Serial Number <div>R 92671</div>	
<b>Sample Information</b> System Name / Facility: Sampling Point (s):  System No.:	<b>Reporting Information</b> Name: Dept./Branch: Address:  Telephone No.:  <b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____			

☐ Drinking Water      ☐ Groundwater      ☐ Surface Water      ☐ Wastewater  
☐ Raw      ☐ Water Treatment Plant (WTP)      ☐ Distribution System      ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted

- |   |           |   |   |
|---|-----------|---|---|
| <input type="checkbox"/> Air Filters            | Date/Time | <input type="checkbox"/> Seawater       | <input type="checkbox"/> Sludge (Semi-solid Samples)    |
| Finishing: _____                                | _____     | <input type="checkbox"/> Milk           | <input type="checkbox"/> Soil/Sediment                  |
| Starting: _____                                 | _____     | <input type="checkbox"/> Wipes          | <input type="checkbox"/> Biota (Type): <u>Sheephead</u> |
| Net (M <sup>3</sup> ) _____                     | _____     | <input type="checkbox"/> Radon Canister | <input type="checkbox"/> Other: _____                   |
| <input type="checkbox"/> Air Charcoal Cartridge |           |   |   |

☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

<input type="checkbox"/> Gross Alpha	<input type="checkbox"/> Gross Beta	<input type="checkbox"/> Gamma Scan
<input type="checkbox"/> Total Uranium	<input type="checkbox"/> Total Beta (LSC) <i>4/6/12</i>	<input type="checkbox"/> NORM (Gamma)
<input type="checkbox"/> Total Radium	<input type="checkbox"/> Tritium ( $^3\text{H}$ )	<input type="checkbox"/> Isotopic Americium / Curium
<input type="checkbox"/> Radium-226	<input type="checkbox"/> Carbon-14	<input type="checkbox"/> Isotopic Plutonium
<input type="checkbox"/> Radium-228 <i>Y</i>	<input type="checkbox"/> Iodine-131	<input type="checkbox"/> Isotopic Thorium
<input type="checkbox"/> Radon-222	<input type="checkbox"/> Strontium-89, 90	<input type="checkbox"/> Isotopic Uranium
<input type="checkbox"/> Other (Specify): _____	<input type="checkbox"/> Nickel-63	<input type="checkbox"/> Iron-55

1.	Date	Name (Print)	Signature	Date
	Time Custody Received	Organization		Time Custody Released
2.	Date	Name (Print)		Date
	Time Custody Received	Organization		Time Custody Released
3.	Date 4-12-12	Name (Print) VA		Date
	Time Custody Received 11:00	Organization DWRLB		Time Custody Released

**A. Condition at Time of Receipt:**

<input type="checkbox"/> Acceptable	<input type="checkbox"/> Broken Container	<input type="checkbox"/> Leaked in Transit	<input type="checkbox"/> Improper Container
<input type="checkbox"/> Holding Time Exceeded	<input type="checkbox"/> Sample Not Cooled	<input type="checkbox"/> Insufficient Sample	

**B. Preservatives/Carriers:**

<input type="checkbox"/> Added While Sampling	<input type="checkbox"/> Added in Laboratory	<input type="checkbox"/> Not Added	<input type="checkbox"/> Not Applicable
---	--	------------------------------------	---



State of California - Health and Human Services Agency

California Department of Public Health

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940



**FINAL Analysis Results Report for Task ID. 12-0047**

Collector:	RHM	RHB	Requestor:	Steve Hsu	RHB
				1500 Capitol Avenue, MS 7610	
	SAN ONOFRE	CA		Sacramento	CA 95814-5006
	Phone Number:			Phone Number:	916-440-7940
Site/Project Name: San Onofre NPP / Biota / 2nd Qtr 2012					
System No:		Billing Agency: RHB		Samples Received by Lab: 4/12/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0047-01	Sample ID: R 92674 Sample Type: Biota	Time Collected: 4/10/2012 11:45	Sampling Point: Calif Spiny Lobster	
Dry Wt/Wet Wt		0.2758		
K-40	HASL Ga-01-R	14.0 +/- 0.320	0.296	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received 4-12-12	Lab No. (Leave Blank) 12-0047
	Date & Time Sampled 4-10-12 11:45	Serial Number R 92674
<b>Collector Information</b> Name: Dept./Branch: Address: Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address: Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s): System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water    ☐ Groundwater    ☐ Surface Water    ☐ Wastewater  
☐ Raw    ☐ Water Treatment Plant (WTP)    ☐ Distribution System    ☐ Point of Use (POU)  
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- ☐ Air Filters    Date/Time    ☐ Seawater    ☐ Sludge (Semi-solid Samples)  
 Finishing: \_\_\_\_\_    ☐ Milk    ☐ Soil/Sediment  
 Starting: \_\_\_\_\_    ☐ Wipes    ☐ Biota (Type): California  
 Net (M<sup>2</sup>) \_\_\_\_\_    ☐ Radon Canister    ☐ Other: Spiny lobster
- ☐ Air Charcoal Cartridge

## COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: \_\_\_\_\_ Iced/Frozen: \_\_\_\_\_ Other: \_\_\_\_\_  
☐ Field Measurement: \_\_\_\_\_ mR/hr    ☐ Radionuclide(s), if known: \_\_\_\_\_  
☐ Rush/Priority (should be prearranged and have supervisory approval)

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- ☐ Gross Alpha    ☐ Gross Beta    ☐ Gamma Scan  
☐ Total Uranium    ☐ Total Beta (LSC)    ☐ NORM (Gamma)  
☐ Total Radium    ☐ Tritium (<sup>3</sup>H)    ☐ Isotopic Americium / Curium  
☐ Radium-226    ☐ Carbon-14    ☐ Isotopic Plutonium  
☐ Radium-228    ☐ Iodine-131    ☐ Isotopic Thorium  
☐ Radon-222    ☐ Strontium-89, 90    ☐ Isotopic Uranium  
☐ Other (Specify): \_\_\_\_\_    ☐ Nickel-63    ☐ Iron-55

## CHAIN OF CUSTODY

1.	Date	Name (Print)	Date
	Time Custody Received	Organization	Signature
2.	Date	Name (Print)	Date
	Time Custody Received	Organization	Signature
3.	Date 4-12-12	Name (Print) VA	Date
	Time Custody Received 11:00	Organization DWRLB	Signature
			Time Custody Released

## LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:**  
☐ Acceptable    ☐ Broken Container    ☐ Leaked in Transit    ☐ Improper Container  
☐ Holding Time Exceeded    ☐ Sample Not Cooled    ☐ Insufficient Sample
- B. Preservatives/Carriers:**  
☐ Added While Sampling    ☐ Added in Laboratory    ☐ Not Added    ☐ Not Applicable



State of California - Health and Human Services Agency

California Department of Public Health

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940



FINAL Analysis Results Report for Task ID. 12-0046

Collector:	RHM	RHB	Requestor:	Steve Hsu	RHB
				1500 Capitol Avenue, MS 7610	
	SAN ONOFRE	CA		Sacramento	CA 95814-5006
	Phone Number:			Phone Number:	916-440-7940
Site/Project Name: San Onofre NPP / Biota / 2nd Qtr 2012					
System No:		Billing Agency: RHB		Samples Received by Lab: 4/12/2012	

Parameter	Method	Result +/- CE	MDA 95	Units
Lab No: 12-0046-01	Sample ID: R 92673 Sample Type: Biota	Time Collected: 4/10/2012 11:00	Sampling Point: Calif Mussel	
Dry Wt/Wet Wt		0.1880		
K-40	HASL Ga-01-R	11.5 +/- 0.334	0.779	pCi/g dry wt

- (1) Precision criteria for these method were determined to be acceptable.
- (2) CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980.
- (3) MDA95 is the sample specific minimum detectable activity at the 95% confidence level which is the LLD95 divided by 2.22, the efficiency, and the yield, and may include factors for abundance, decay, and ingrowth, dependent on the particular radio-nuclide. LLD95 is defined in section 7010G, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

## REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

<b>Sanitation and Radiation Laboratories Branch</b> 850 Marina Bay Parkway, G164 Richmond, CA 94804 510-620-2911	Date Received <b>9-12-12</b>	Lab No. (Leave Blank) <b>12-0046</b>
	Date & Time Sampled <b>4-10-12 11:00</b>	Serial Number <b>R 92673</b>
<b>Collector Information</b> Name: Dept./Branch: Address:  Telephone No.:	<b>Reporting Information</b> Name: Dept./Branch: Address:  Telephone No.:	
<b>Sample Information</b> System Name / Facility: Sampling Point (s):  System No.:	<b>Billing Agency</b> <input type="checkbox"/> DWFOB ( ) <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB ( ) <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

## TYPE OF SAMPLE (Check all applicable boxes)

- |   |  |  |  |
|---|--|--|--|
| <input type="checkbox"/> Drinking Water   | <input type="checkbox"/> Groundwater                 | <input type="checkbox"/> Surface Water       | <input type="checkbox"/> Wastewater                      |
| <input type="checkbox"/> Raw  | <input type="checkbox"/> Water Treatment Plant (WTP) | <input type="checkbox"/> Distribution System | <input type="checkbox"/> Point of Use (POU)              |
| <input type="checkbox"/> Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted |  |  |  |
| <input type="checkbox"/> Air Filters  | Date/Time  | <input type="checkbox"/> Seawater            | <input type="checkbox"/> Sludge (Semi-solid Samples)     |
| Finishing: _____  | _____  | <input type="checkbox"/> Milk                | <input type="checkbox"/> Soil/Sediment                   |
| Starting: _____   | _____  | <input type="checkbox"/> Wipes               | <input type="checkbox"/> Biota (Type): <u>California</u> |
| Net (M <sup>3</sup> ) _____   | _____  | <input type="checkbox"/> Radon Canister      | <input type="checkbox"/> Other: <u>Mussel</u>            |
| <input type="checkbox"/> Air Charcoal Cartridge   |  |  |  |

## COMMENTS: (Cautions, etc.):

- |  |   |              |
|--|---|--------------|
| <input type="checkbox"/> Field Treatment: Preservatives added: _____                         | Iced/Frozen: _____  | Other: _____ |
| <input type="checkbox"/> Field Measurement: _____ mR/hr                                      | <input type="checkbox"/> Radionuclide(s), if known: _____ |              |
| <input type="checkbox"/> Rush/Priority (should be prearranged and have supervisory approval) |   |              |

## ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Gross Alpha            | <input type="checkbox"/> Gross Beta                | <input type="checkbox"/> Gamma Scan                  |
| <input type="checkbox"/> Total Uranium          | <input type="checkbox"/> Total Beta (LSC)          | <input type="checkbox"/> NORM (Gamma)                |
| <input type="checkbox"/> Total Radium           | <input type="checkbox"/> Tritium ( <sup>3</sup> H) | <input type="checkbox"/> Isotopic Americium / Curium |
| <input type="checkbox"/> Radium-226             | <input type="checkbox"/> Carbon-14                 | <input type="checkbox"/> Isotopic Plutonium          |
| <input type="checkbox"/> Radium-228             | <input type="checkbox"/> Iodine-131                | <input type="checkbox"/> Isotopic Thorium            |
| <input type="checkbox"/> Radon-222              | <input type="checkbox"/> Strontium-89, 90          | <input type="checkbox"/> Isotopic Uranium            |
| <input type="checkbox"/> Other (Specify): _____ | <input type="checkbox"/> Nickel-63                 | <input type="checkbox"/> Iron-55                     |

## CHAIN OF CUSTODY

- |    |                                    |                            |                              |
|----|------------------------------------|----------------------------|------------------------------|
| 1. | Date _____                         | Name (Print) _____         | Date _____                   |
|    | Time Custody Received _____        | Organization _____         | Signature _____              |
| 2. | Date _____                         | Name (Print) _____         | Date _____                   |
|    | Time Custody Received _____        | Organization _____         | Signature _____              |
| 3. | Date <u>4-12-12</u>                | Name (Print) <u>VA</u>     | Date _____                   |
|    | Time Custody Received <u>11:00</u> | Organization <u>DWR/LB</u> | Signature <u>[Signature]</u> |
|    |                                    |                            | Time Custody Released _____  |

## LABORATORY REMARKS (Leave Blank)

- |  |  |  |   |
|--|--|--|---|
| <b>A. Condition at Time of Receipt:</b>        |  |  |   |
| <input type="checkbox"/> Acceptable            | <input type="checkbox"/> Broken Container    | <input type="checkbox"/> Leaked in Transit   | <input type="checkbox"/> Improper Container |
| <input type="checkbox"/> Holding Time Exceeded | <input type="checkbox"/> Sample Not Cooled   | <input type="checkbox"/> Insufficient Sample |   |
| <b>B. Preservatives/Carriers:</b>              |  |  |   |
| <input type="checkbox"/> Added While Sampling  | <input type="checkbox"/> Added in Laboratory | <input type="checkbox"/> Not Added           | <input type="checkbox"/> Not Applicable     |